Amendments to the Claims

Please cancel Claims 1-21. Please add new Claims 22-42. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

- 1-21 (Cancelled)
- 22. (New) A process for the production of a protein comprising the steps of:
 - a) culturing a Zygosaccharomyces bailii strain,
 - b) expressing and secreting a protein,
 - c) isolating the protein.
- 23. (New) The process of Claim 22, wherein the Z. bailii strain is transformed with a vector comprising a DNA sequence coding for the protein, functionally linked to a signal sequence leading to the secretion of the protein and further functionally linked to a promoter.
- 24. (New) The process of Claim 23, wherein the vector is an extra-chromosomal plasmid.
- 25. (New) The process of Claim 24, wherein the plasmid is derived from an endogenous episomal plasmid from a Z. bailii strain.
- 26. (New) The process of Claim 23, wherein the plasmid comprises sequences for replication, stabilization, or plasmid copy number control, obtainable from Z. bailii.
- 27. (New) The process of Claim 25, wherein the plasmid comprises at least 35 bases of one of the sequences selected from the group consisting of SEQ ID No.: 63, SEQ ID No.: 64, SEQ ID No.: 65, SEQ ID No.: 66, SEQ ID No.: 67, SEQ ID No.: 68, SEQ ID No.: 69, SEQ ID No.: 70, and SEQ ID No.: 71.
- 28. (New) The process of Claim 23, wherein the promoter is a triose-phosphate isomerase promoter, obtainable from *Saccharomyces cerevisiae* or from *Z. bailii*.

- 29. (New) The process of Claim 23, wherein the promoter is a glyceraldehyde phosphate dehydrogenase promoter, obtainable from *Saccharomyces cerevisiae*, *Z. bailii or Z. rouxii*.
- 30. (New) The process of Claim 23, wherein the signal sequence is a continuous stretch of 15 to 60 amino acids, comprising one or more positively charged amino acid(s) followed by a stretch of about 5 to 10 hydrophobic amino acids, which are optionally interrupted by non-hydrophobic residues.
- (New) The process of Claim 23, wherein the signal sequence is selected from the list consisting of SEQ ID NO.: 1, SEQ ID NO.: 3, SEQ ID NO.: 5, SEQ ID NO.: 7, SEQ ID NO.: 9, SEQ ID NO.: 11, SEQ ID NO.: 13, SEQ ID NO.: 15, SEQ ID NO.: 17, SEQ ID NO.: 19, SEQ ID NO.: 21, SEQ ID NO.: 23, SEQ ID NO.: 25, SEQ ID NO.: 27, SEQ ID NO.: 29, SEQ ID NO.: 31, SEQ ID NO.: 33, SEQ ID NO.: 35, SEQ ID NO.: 37, SEQ ID NO.: 39, SEQ ID NO.: 41, SEQ ID NO.: 43, SEQ ID NO.: 45, SEQ ID NO.: 47, SEQ ID NO.: 49, SEQ ID NO.: 51, SEQ ID NO.: 53, SEQ ID NO.: 55, SEQ ID NO.: 57, SEQ ID NO.: 59, and SEQ ID NO.: 61.
- 32. (New) The process of Claim 22, wherein the Z. bailii strain is transformed with a vector comprising the DNA sequence coding for the protein, functionally linked to the signalling pre-sequence of the alpha-subunit of the K1 killer toxin of Kluyveromyces lactis and further functionally linked to the triose-phosphate isomerase promoter from S. cerevisiae.
- 33. (New) The process of Claim 32, wherein the vector is the plasmid pZ_3kl as shown in figure 1b.
- 34. (New) The process of Claim 22, wherein the Z. bailii strain is transformed with a vector comprising the DNA sequence coding for the protein, functionally linked to the signal sequence of the pre-pro α-factor of S. cerevisiae and further functionally linked to the triose-phosphate isomerase promoter from S. cerevisiae.

- 35. (New) The process of claim 34, wherein the vector is the plasmid $pZ_3pp\alpha$ as shown in figure 1c.
- 36. (New) The process of Claim 23, wherein the DNA sequence coding for the protein is derived from animal, bacterial, fungal, plant, or viral sources.
- 37. (New) The process of Claim 23, wherein the *Z. bailii* strain that is transformed is selected from the list of: ATCC 36947, ATCC 60483, NCYC 1427 or ATCC 8766.
- 38. (New) The process of Claim 22, wherein the *Z. bailii* strain has been subjected to a selection process for improved secretion.
- 39. (New) The process of Claim 22, wherein the *Z. bailii* strain is cultivated in a chemically defined medium.
- 40. (New) The process of Claim 22, wherein the protein is isolated from the culture medium.
- 41. (New) A Z. bailii strain, expressing and secreting a heterologous protein.
- 42. (New) The Z. bailii strain of Claim 41, wherein the cells are transformed with a vector comprising a DNA sequence coding for the heterologous protein, functionally linked to a signal sequence leading to the secretion of the protein and further functionally linked to a promoter.